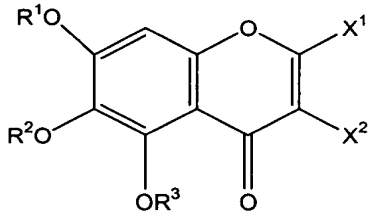
Amendments to the Claims:

This listing will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound according to formula I :



(I)

wherein:

R^1, R^2, and R^3 are each independently H, alkyl, alkenyl, alkynyl, $-SO_3H$,$-PO_3H_2$, or carbohydrate; orR^1 and R^2 are each independently $(CH_2)_nY$ and $[CH_2CH\ (OH)\ CH_2]Y$, wherein Y is H, OR^4, NR^5R^6,$COOR^4$, or $\underline{CONR^5R^6}$ ~~$OONR^5R^6$~~ wherein R^4, R^5, and R^6 are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate, and R^5 and R^6 together may form a 5 to 7-membered ring;

or R^1 and R^2 together are heterocycles;

or R^2 and R^3 together are heterocycles; and

X^1 and X^2 are each independently of the formula :

$Ar\text{-}X^3\text{-}T$

wherein Ar may or may not be present, but at least either X^1 or X^2 must be present; and when both X^1 and X^2 are present, Ar is phenyl, furanyl, thienyl, pyridyl, cyclohexyl or benzyl; wherein X^3 is H, C, N, NR', NR'R", NR'SO_2 R", O, or S, ~~subject to the proviso that the compound according to formula I is not baicalein or 5,6, 7-trihydroxyisoflavone,~~ wherein R' and R" are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate; wherein T is $(CH_2)_nY$ or $[CH_2CH\ (OH)\ CH_2]Y$, wherein n is 0 or 3, Y is H, OR^4, NR^5R^6, $COOR^4$, or $CONR^5R^6$ ~~$OONR^5R^6$~~ wherein R^4, R^5, and R^6 are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate, and R^5 and R^6 together may form a 5 to 7-membered ring; or pharmaceutically acceptable salts thereof;

when either of X^1 or X^2 is present, Ar is a substituted phenyl:

wherein X^3 is ~~H,~~ C, N, NR', NR'R", NR'SO_2 R", ~~O~~ OR^1, or S, ~~subject to the proviso that the compound according to formula I is not baicalein or 5,6, 7-trihydroxyisoflavone~~;

or when either of X^1 or X^2 is present, Ar is furanyl, thienyl, pyridyl, cyclohexyl or benzyl: and X^3 is H, C, N, NR', NR'R", NR'SO_2 R", O, or S; ~~subject to the proviso that the compound according to formula I is not baicalein or 5,6, 7-trihydroxyisoflavone,~~ wherein R' and R" are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate; and OR^1 is $O(CH_2)_nY$, wherein n is 1 to 2, Y is OR^4, NR^5R^6, $COOR^4$, or $CONR^5R^6$; or $O[CH_2CH\ (OH)\ CH_2]Y$, wherein Y is H, OR^4, NR^5R^6, $COOR^4$, or ~~$OONR^5R^6$~~ $CONR^5R^6$; wherein T is $(CH_2)_nY$ or $[CH_2CH\ (OH)\ CH_2]Y$, wherein n is 0-3, Y is H, OR^4, NR^5R^6, $COOR^4$, or $CONR^5R^6$ wherein R^4, R^5, and R^6 are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate, and R^5 and R^6 together may form a 5 to 7-membered ring; or pharmaceutically acceptable salts thereof, subject to the proviso that the compound according to formula I is not baicalein or 5,6, 7-trihydroxyisoflavone.

2. (Original) The compound according to claim 1, wherein the alkyl is a lower alkyl.

3. (Original) The compound according to claim 1, wherein the carbohydrate is a monosaccharide, oligosaccharide, or polysaccharide, or combinations thereof.

4. (Original) The compound according to claim 1, wherein R^1, R^2 and R^3 are each independently-SO_3H or-PO_3H_2.

5. (Original) The compound according to claim 1, wherein R^1 and R^2 together is a five-membered or six-membered ring structure.

6. (Original) The compound according to claim 1, wherein R^2 and R^3 together is a five-membered or six-membered heterocycle.

7. (Canceled)

8. (Original) The compound according to claim 1, wherein the compound is a salt form of the compound.

9. (Original) The compound according to claim 8, wherein the salt form of the compound is a sodium or potassium salt of the compound.

10. (Original) The compound according to claim 1, wherein the compound is water soluble.

11. (Currently Amended) The compound ~~according to claim 1~~, wherein the compound is 4'- (amino)- 5,7- dihydroxy-6-methoxy flavone, 4'- (amino)- 5,6,7-trimethoxy flavone, 4'- (N,N-dimethylamino)-5, 6,7-trimethoxyflavone, 4'- (methylamino)-5, 6,7-trimethoxyflavone, 4'-[N-methyl-N-(3-methoxypropyl)amino)-5,6,7-trimethoxyflavone, 4'-[N,N-di-(2-hydroxyethyl)-amino)-5,7-dihydroxy-6-methoxyflavone, 4'-(2-hydroxyethylamino)-5,7-dihydroxy-6-methoxyflavone, 4'-(2-methanesulfonatoethylamino)-5,7-dihydroxy-6-methoxyflavone, 4'-[2-(N,N-diethylamino)ethylamino]-5,7-dihydroxy-6-methoxyflavone, 2,3-diphenyl-5,6,7-trimethoxychromone, 2,3-diphenyl-5,6,7-trihydroxychromone, 4'-(methylsulfonamido)-5,6,7-trimethoxyflavone, 4'-[2-(N,N-diethylamino)ethoxy]-6,7-methylenedioxy-5-hydroxy-flavone, 4'-(2,3-dihydroxy-propyloxy)-5,6,7-trimethoxyflavone, or 4'-(Carbmethoxymethoxy)-5,6,7-trimethoxyflavone.

12. (Original) A pharmaceutical formulation comprising a compound according to claim 1 and at least one pharmaceutically acceptable carrier, diluent, or excipient.

13. (Original) The pharmaceutical formulation comprising a compound according to claim 12, wherein the pharmaceutically acceptable carrier is an aqueous carrier.

14. (Original) A method of treating diseases associated with overproduction of TNF-α selected from the group consisting of arthritis, rheumatoid arthritis, Crohn's disease, ulcerative colitis, insulin resistance, multiple sclerosis, organ failure, pulmonary fibrosis, and atherosclerosis, comprising administering to a subject in need thereof an effective amount of a compound according to claim 1.

15. (Original) Method of treating diseases associated with overproduction of superoxide anion radical selected from the group consisting of Alzheimer's disease, Parkinson's disease, aging, cancer, myocardial infarction, atherosclerosis, autoimmune disease, radiation injury, emphysema, sunburn, joint disease, and oxidative stress, comprising administering to a subject in need thereof an effective amount of a compound according to claim 1.

16. (Canceled)

17. (canceled).

18. (Currently Amended) A method of treating organ damage, selected from liver damage, lung damage or kidney damage or combinations thereof comprising administering to a subject in need thereof an effective amount of a compound according to claim 1.

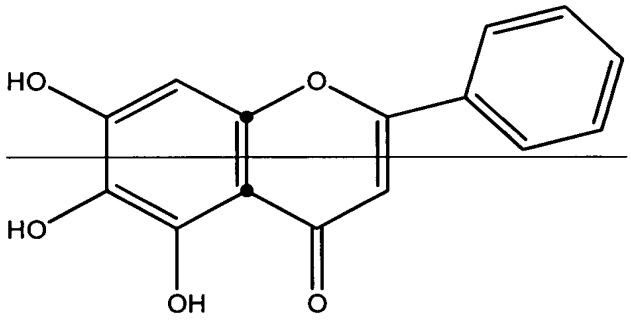
19. (Canceled).

21. (Canceled).

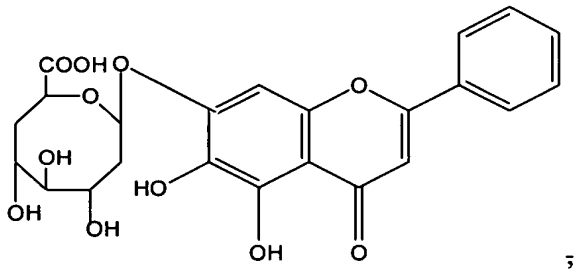
22. (Canceled).

23. (Canceled).

24. (Currently Amended) A method of treating conditions selected from the group consisting of diseases associated with the overproduction of TNF-α, overproduction of superoxide anion radical, organ damage, ~~arthritis, neurodegenerative diseases, cancer, and cardiac disorders~~, and combinations thereof, comprising administering to a subject in need thereof, a pharmaceutical composition comprising a therapeutically effective amount of a compound selected from the following: ~~(II)~~



(III)



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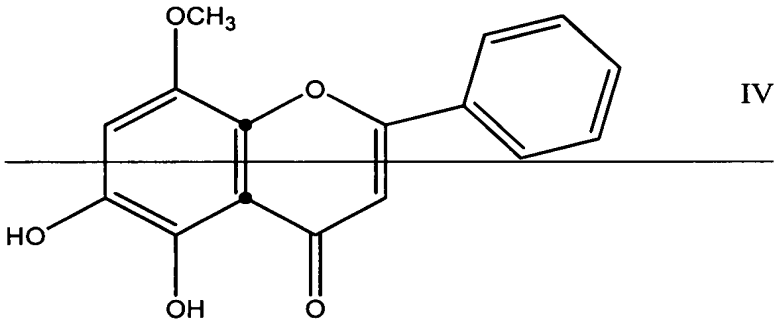


IV

25. (Original) The method according to claim 24, wherein the organ damage is liver damage, lung damage, or kidney damage, or combinations thereof.

26. (Canceled).

27. (Canceled).

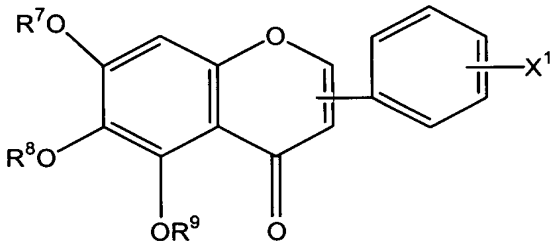
28. (Canceled).

29. (Original) The method according to claim 24, wherein the pharmaceutical composition is administered orally or parenterally.

30. (Currently Amended) The method according to claim 24, wherein the pharmaceutical composition is administered in combination with at least one other therapeutic agent useful for the prevention or treatment of conditions associated with overproduction of TNF-α, overproduction of superoxide anion radical, ~~septic shock, inflammation~~, and organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~.

31. (Currently Amended) A method of treating conditions selected from the group consisting of diseases associated with the overproduction of TNF-α, overproduction of superoxide anion radical, ~~septic shock~~, organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~, and combinations thereof, comprising administering to a subject in

need thereof, a pharmaceutical composition comprising a therapeutically effective amount of a compound of the formula V:



(V)

wherein:R^7,R^8, and R^9 are each independently H, alkyl,-SO_3H,-PO_3H_2, carbohydrate, or benzyl; or R^7 and R^8 together are heterocycles;

or R^8 and R^9 together are heterocycles; X^1 is H, C, NH_2, $NHCOCH_3$, ~~NO_2~~, or OR^{10}, wherein R^1 is H, alkyl, carbohydrate, or benzyl, or pharmaceutically acceptable salts thereof, ~~with the proviso that when Ph-X^1 is at the 2-position and R^7, R^8, and R^9 are each independently H, alkyl or carbohydrate, the compound is not used to treat septic shock.~~

32. (Original) The method according to claim 31, wherein the alkyl is a lower alkyl.

33. (Original) The compound according to claim 1, whereinR^1, R^2 and R^3 are each independently-SO_3H or-PO_3H_2.

34. (Original) The method according to claim 31, wherein the carbohydrate is a monosaccharide, oligosaccharide, or polysaccharide, or combinations thereof.

35. (Original) The method according to claim 31, wherein $R^7$and R^8 together are heterocycles.

36. (Original) The method according to claim 31, wherein R^7 and R^8 together is a five-membered ring structure or a six-membered ring structure.

37. (Original) The method according to claim 31, wherein R^8 and R^9 together is a five-membered or six-membered ring structure.

38. (Original) The method according to claim 31, wherein X^1 is substituted on the ortho, meta, or para position of the phenyl ring.

39. (Original) The method according to claim 31, wherein the compound is 5,6,7-trihydroxyisoflavone.

40. (Original) The method according to claim31, wherein the organ damage is liver damage, lung damage, or kidney damage, or combinations thereof.

41. (Canceled).

42. (Cancelled).

43. (Canceled)

44. (Currently Amended) The method according to claim 31, wherein the pharmaceutical composition is administered in combination with at least one other therapeutic agent useful for the prevention or treatment of conditions associated with overproduction of TNF-α, overproduction of superoxide anion radical, ~~septic shock, inflammation~~, and organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~.

45. (Original) The method according to claim 31, wherein the pharmaceutical composition is administered orally or parenterally.

46. (Currently Amended) A method of treating conditions selected from the group consisting of diseases associated with the overproduction of TNF-α overproduction of superoxide anion radical, ~~septic shock~~, organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~, and combinations thereof, comprising administering to a subject in need thereof, a pharmaceutical composition comprising a therapeutically effective amount of a compound selected from the group consisting of baicalein-6-sulfate, baicalein-6,7-disulfate, bacalein-6-phosphate, bacalein-6,7-diphosphate, baicalein- 5,6, 7-triphosphate, sodium and potassium salt derivatives thereof, and pharmaceutically acceptable salts thereof.

47. (Original) The method according to claim 46, wherein the organ damage is liver damage, lung damage, or kidney damage, or combinations thereof.

48. (Canceled).

49. (Canceled).

50. (Canceled).

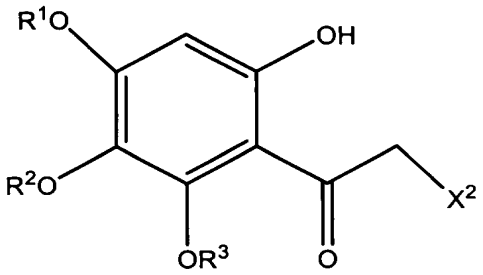
51. (Original) The method according to claim 46, wherein the compound is baicalein 6-sulfate or sodium or potassium salt derivatives thereof.

52. (Currently Amended) The method according to claim 46, wherein the pharmaceutical composition is administered in combination with at least one other therapeutic agent useful for the prevention or treatment of conditions associated with overproduction of TNF-α, overproduction of superoxide anion radical, ~~septic shock, inflammation~~, organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~.

53. (Original) The method according to claim 44, wherein the pharmaceutical composition is administered orally or parentally.

54. (Currently Amended) A method of treating conditions selected from the group consisting of diseases associated with the overproduction of TNF-a, overproduction of superoxide anion radical, ~~inflammation, septic shock,~~ organ damage, ~~neurodegenerative diseases, cancer, and cardiac disorders~~, and combinations thereof, comprising administering to a subject in need thereof, a pharmaceutical composition comprising a therapeutically effective amount of 4'-(N,N-dimethylamino)-5, 6,7-trimethoxyflavone, 4'-(methylamino)-5, 6,7-trimethoxyflavone, 2,3-diphenyl-5, 6,7-trimethoxychromone, 2,3-diphenyl-5, 6,7-trihydroxychromone, 4'-(methylsulfonamido)-5, 6,7trimethoxyflavone or 4'-(Carbmethoxymethoxy)-5, 6,7-trimethoxyflavone.

55. (Currently Amended) A method of synthesizing a compound of formula I as defined in claim 1, or pharmaceutically acceptable salts thereof, comprising reacting a compound of formula (VI):

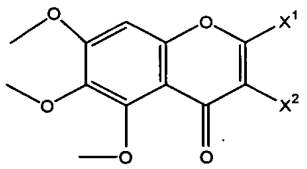


(VI)

herein:

R^1, R^2, and R^3 are each independently H, alkyl, alkenyl, alkynyl, $-SO_3H$,$-PO_3H_2$, or carbohydrate; orR^1 and R^2 are each independently $(CH_2)_nY$ and $[CH_2CH\ (OH)\ CH_2]Y$, wherein Y is H, OR^4, NR^5R^6,$COOR^4$, or $OONR^5R^6$ wherein R^4,R^5, and R^6 are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate, and R^5 and R^6 together may form a 5 to 7-membered ring; or R^1 and R^2 together are heterocycles; with $(ArCO)_2O$, $ArCO_2Na$ and an acid sodium salt wherein Ar is as defined above.

56. (Currently Amended) A method of synthesizing a compound of formula I as defined in claim 1 wherein X^1 and X^2 represent Ar-X^3-T wherein X^3 is H, R^1, R^2, and R^3 are H or one of R^1 and R^2 is CH_3, or pharmaceutically acceptable salts thereof, comprising reacting a compound of formula VII:



wherein X^1 and X^2 represent Ar-X^3-T wherein X^3 is H, with aqueous hydrobromic acid (HBr) or boron tribromide (BBr_3).

57. (Currently Amended) A method of synthesizing a compound of formula I as defined in claim 1, or pharmaceutically acceptable salts thereof, comprising reacting a compound of formula I wherein X^1 and X^2 represent Ar-X^3-T whereinX^3-T is OH or NH_2 with an electrophile such as W $(CH_2)_nY$, W $CH_2CH(O)$ CH_2, or $HOCH_2$ $CH(O)CH_2$ wherein W is a leaving group and Y is H, OR^4, NR^5R^6, $COOR^4$, or$OONR^5R^6$ wherein R^4, R^5, and R^6 are each independently H, alkyl, alkenyl, alkynyl, or carbohydrate, and R^5 and R^6 together may form a 5 to 7-membered ring.

58. (New) The method according to claim 31, wherein the compound is 4'.5,6,7-tetrahydroxyflavone

59. (New) The method according to claim 31, wherein the compound is 4'-amino -5,7-dihydroxy-6-methoxy flavone